

Research over the last 50 years has changed how educators and scientists understand the cognitive abilities of young children<sup>1,2,3,4</sup> It is now broadly recognized that preschool aged children have well-developed theories about the natural and social worlds and that even at a very young age, these children are capable of complex, scientific reasoning<sup>5,6</sup>.

Some say young children are natural scientists; it is the way they learn. They are naturally curious, always asking questions and wondering why. They tackle their world in many ways using the classic scientific method: asking a question, constructing a hypothesis, testing with an experiment, drawing conclusions. Some of their conclusions may appear as misconceptions (ex: air is made by fans, skunks are black and white kitties), when in fact they are just their emerging naïve theories.

Even before entering school, young children demonstrate motivation, curiosity, and an intense drive to explore, learn, and control their environments<sup>7</sup>.

Young children are active and native science learners who, with the encouragement and support from adults, will eagerly explore, experiment with, and learn about the natural, physical, and social world around them<sup>8</sup>.

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Developed by Evergreene Research and Evaluation for the Collaborative for Early Science Learning.

Contact: Lorrie Beaumont, [lbeaumont@evergreeneresearch.com](mailto:lbeaumont@evergreeneresearch.com)

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This project was made possible in part by the Institute of Museum and Library Services